

Glossary of Technological Terms

The number of terms commonly used to describe the technology of modern times is often bewildering, yet continues to expand rapidly. The following list is therefore not intended to be inclusive, but should afford the reader with a sufficient amount of information to understand much of the language that is used most often.

Accelerator:

A circuit card containing electronic components designed to be plugged into a computer to make it run faster.

Access Time:

The amount of time it takes a computer to locate an area of memory for data storage or retrieval.

AI:

Artificial Intelligence -- the field of computer science dedicated to developing computers that mimic the complex relational functions of the human brain. Expert systems are an early form of AI.

Algorithm:

Any computing process that uses a well-defined series of steps to predictably solve a particular kind of problem. In programming, algorithms are used as either a specific solution or a starting point for experimentation.

Alpha Testing:

Conducted internally by the manufacturer, alpha testing takes a new product through a protocol of testing procedures to verify product functionality and capability.

Analog:

A process or device which represents or calculates data in a continuously variable form rather than in separate steps.

Anonymous FTP Site:

A public FTP server that can be accessed by any user of the Internet.

Application Software:

A computer program or system designed to perform specific tasks. Broad examples of computer applications are word processing and graphics programs such as Microsoft Word(TM), QuarkXPress(TM) and Adobe Illustrator(TM).

Architecture:

Refers to the physical configuration of a computer's internal operations, including memory, input/output structure, instruction set and registers. The term is also used to describe the specific components and the interactions that form a computer system.

Archival Storage:

Copies of digital information stored on magnetic tape, floppy disks, optical disk, CD-ROM or other media used to ensure against loss in case the original materials are deleted or damaged.

ARPANet:

Advanced Research Projects Administration Network. This was the precursor to the Internet. The Department of Defense as an experiment in wide-area networking that would survive a nuclear war developed ARPANet in the late 1960s.

Array:

A table of numbers or text, which the computer holds in its memory-used in programming, a list of data values, all the same type.

Array Processors:

Identical processors connected together and acting synchronously, often under the control of a CPU. Some systems use array processors for high-speed floating-point math operations to speed up video operations.

ASCII:

American Standard Code for Information Exchange. This is a world standard for the codes used by computers to represent the characters of the alphabet and numbers, etc. There are 128 ASCII codes, which are represented by an eight-digit binary number: 00000000 through 11111111.

Asynchronous Communication:

Also known as serial communication. A way for one computer to send data to another without requiring precisely synchronized data pulses.

Special codes are embedded in the stream of pulses so that the receiving computer can locate each byte of data.

ATM (Asynchronous Transfer Mode):

A switching protocol that can handle all types of traffic - voice, data, graphics, and video.

@:

Used to separate the user ID and domain name of an Internet address (pronounced "at"). Authentication Security feature that determines a user's identity and legitimacy.

BBS:

Bulletin board system; once referred to stand alone desktop computers with a single modem that answered a phone, but can now refer to systems as complicated and interconnected as commercial services.

Backup:

The process of copying a file or program in the event the original is damaged, lost or unavailable. Bandwidth The data transmission capacity of a network, used colloquially to refer to the size of the Net; some information transmittals; some information (for example, a multitude of graphic files) are considered a "waste of bandwidth."

Bandwidth:

A measurement of how much information can be sent through a network connection in a given time interval. Bandwidth is usually measured in bits per second (bps).

Baud:

A measure of the rate by which data is transmitted and is most commonly used in rated modems. Expressed in bits per second, one baud equals one bit per second.

Beta Testing:

The second stage test version of a newly developed piece of hardware and/or software which is distributed free to a limited sampling of users so that they can subject it to daily use and report any problems to the manufacturer before release to the public.

Binary:

The base-two numbering system which uses only the digits 0 and 1. It is the format for processing data in computers.

BINHEX:

BINary Hexadecimal. Binhex is a method for converting non-text files (non-ASCII) into ASCII. This is relevant because Internet E-mail is ASCII.

Bit:

Abbreviation for "binary digit." Internally, computers store information as patterns of ones and zeros. Tiny transistors are either "on" (storing a value of "1") or 11 off (storing a value of "0"). The digits "1" and "0" are "bits"- the smallest pieces of information a computer can handle.

Bitmap:

A computerized image made up of dots. In the simplest form of bitmap, each dot is either on (white) or off (black) and is stored as a single "bit" of information in the computer's memory.

BITNET:

Because It's Time NETwork. A network of educational sites separate from the Internet, although E-mail is freely exchanged between BITNET on the Internet. Listservs, the most popular form of E-mail discussion groups, originated on Bitnet. Bitnet machines are IBM VMS machines. Bitnet usage is declining as the WWW expands.

BPS:

Bits per second.

Browser:

Software that allows users to "browse" the World Wide Web. Browsers include Mosaic, Netscape Navigator, and Microsoft Internet Explorer. Services such as American OnLine are not browsers but provide access to browsers.

Buffer:

A segment of computer memory used as a temporary data storage area, used to provide a flexible data bridge to smooth communication between parts of an operating system that have different data transfer rates.

Bulletin Board:

An electronic information and data transfer service that can be accessed through the telecommunications network from any computer terminal configured with a modem and telecommunications software.

Bus:

The main "data pathway" inside a computer enabling the CPU to communicate with other devices, such as the video monitor or the disk drive(s). Byte A unit of information consisting of a sequence of eight adjacent binary digits (bits) and usually sufficient to store one character of information.

CCD:

Initials standing for "Charged Coupled Device." An array of light-sensitive solid-state measuring devices that react electronically to exposure of light. It is the technology used most often in desktop scanners. CD-ROM Compact Disk-Read Only Memory. A medium for storing 670 megabytes of digital information that can be retrieved repeatedly but cannot be changed.

CERN:

The European Particle Physics Laboratory in Geneva, Switzerland; the organization responsible for creating the World Wide Web.

Chip:

A small electronic component containing a chip of silicon on which many miniaturized transistors and other devices have been etched. Microprocessors are largely made up of chips.

Circuit Board:

Also referred to as a "board" or "card." A rectangle of thin plastic with electronic components mounted on it. It plugs into a computer's bus to add a feature or function that is not otherwise available. For example, a video card may give a computer additional capability for displaying colors.

Client:

A computer connected to a more powerful computer (see server) for complex tasks.

Clone:

A copy. In microcomputer terminology, a clone is a look-alike, act-alike computer that contains the same microprocessor and runs the same programs as a more expensive, better-known name brand. Although a clone is supposed to be exactly alike, in some instances there may be small internal variations that can cause operating problems without the manufacturer's assistance.

Commercial Services:

General term for large commercially-oriented online services (e.g. America Online, CompuServe).

Communications Protocol:

The preliminary signals and settings (handshake) that must be shared by two computers before data can be exchanged between them, usually via a modem. A typical communications protocol will establish the speed of the data flow in bps, error-correction methods that will be used (if any) and data compression systems (if any).

Compression:

The use of special coding techniques so that data can be stored more compactly in order to reduce the amount of room it takes to be transmitted to a modem or via another transmission method.

Configuration:

The special assemblage of components and devices that make up the hardware parts of a complete system.

Console:

An electronic workstation that includes a video monitor.

Control Character:

In an alphanumeric code, it alters the meaning of the codes that follow it until another control character is used. Usually this signifies what follows should be regarded as a command rather than data.

Conventional Method:

Describes the manual process of producing a job. CPU Central Processing Unit. In a modern microcomputer, is generally a single silicon chip which acts as the "brain" of the computer by performing fundamental arithmetic operations and moving bytes of data inside the computer's memory.

Cracker:

A person who maliciously breaks into a computer system to steal files or disrupt system activities; not to be confused with hacker.

Cursor:

A location marker on a computer screen controlled by a mouse or directional keys on

the keyboard. It can be an underline, rectangle, cross, arrow, or other special indicator.

Cyberspace:

A term originated by author William Gibson in his novel Neuromancer, the word currently describes the range of information resources available through computer networks.

Data Shift:

In process color printing, it describes a shift in one of the channels of data that comprise the image file and could cause inconsistent color in some area in the image.

DDES:

Direct Digital Data Exchange Standards. A set of established formats, protocols and values allowing one vendor's equipment to exchange data with another vendor's equipment.

Dedicated Device:

A piece of hardware that is permanently assigned to one task. The task however, can be changed by reprogramming or by the introduction of different software.

Dedicated Link:

An exclusive port dedicated for a dial-up IP account.

Dedicated System:

Describes the permanent assignment of an entire electronic system to one task.

Default:

Software setting that returns specifications to a relative "home-base" in the absence of other instruction from the operator. Depending on the software, new default settings can be made for one or more functions.

Desktop Publishing:

Sometimes abbreviated DTP. The process of mixing type and graphics via a microcomputer to create and control page layouts and save them in a form that is portable to various types of printing equipment.

Device Driver:

A miniature program that acts like a translator, converting the output from one device into data that another device can understand.

Device Independent:

A program or file format that can be used with two or more different computing devices and produce identical results. For example, a page saved in PostScript format should be printable on a LaserWriter or on a Linotronic output device. Device independent color refers to the ability to have color images appear the same on different output devices, including monitors and printers.

Dial-up link:

Also called a switched line, a dial-up link is a low-cost connection to the Internet through a non-dedicated communications line.

Digital:

Information that relies solely on Arabic numerals for expression. In computers, all information is processed in binary numerics (0 and 1) through on/off electrical impulses. Computer programs are written in alpha-numeric code (all keys on a keyboard) and are translated by programs or devices into binary code that can be read by the computer's CPU.

Disk Drive:

An electronic device that through a read-write head, can store information on, or read from, a magnetic disk.

Disk Operating System:

Often abbreviated "DOS," a kind of low-level program which must be present in the computer's memory at all times while the computer is running, in addition to any other programs that are being used. The system (known as DOS in PC-compatibles or The Finder on a Macintosh) manages all disk operations.

DNS:

Acronym for Domain Name System. The distributed, naming service used on the Internet.

DNS Server:

A server that contains IP addressing information.

Domain:

The highest subdivision of the Internet, which are usually by country or type of entity (for example, government or commercial). DNS organizes groups of computers on the Internet through a hierarchy of domains.

Domain Name:

The unique name that identifies an Internet site. Domain names always have two or more parts, separated by dots. The part on the left is the most specific; the part on the right the most general. middle sections of the name fall, appropriately, somewhere between the two extremes of specificity (e.g. cpec.ca.gov)

Download:

The transfer of data from a computer or telecommunications network to another electronic device or storage medium.

DPI:

Dots Per Inch. The measure of resolution in a halftone or printed image. It is also used to describe pixels per inch in a bitmapped image.

DSU:

Acronym for Data Service Unit. The side of the communications channel equipment connected to the bridge or router. It converts all incoming data into the proper format for transmission over the T1 or fractional T1 circuit.

E-mail:

Electronic mail, as distinct from paper mail (which is known in Net parlance as snail mail). A network service that enables users to send and receive messages.

Electronic Publishing:

A technology through which information (text and images) that has been converted to digitized form can be processed in an interactive electronic environment.

EPS:

Encapsulated PostScript. A way of storing visual data so that it can be exchanged between programs or different computer systems. When you save in EPS format, you save a description of your art or page layout in the PostScript language together with some minimal instructions enabling the graphics to be displayed on a non-PostScript video device.

Encode:

The term used to describe the translation of information, such as text or photographs, into binary code.

Encryption:

A method of securing privacy on networks through the use of complex algorithmic codes.

Ethernet:

A local area network (LAN) hardware standard capable of linking up to 1,024 nodes.

Exabyte:

An eight-millimeter, two-gigabyte tape drive providing substantial data storage and archiving on a small cartridge. It is more cost effective than standard magnetic tapes as fewer Exabyte tapes are required to store information.

Expansion Bus:

The main "data pathway" inside a computer, usually fitted with slots which will accept circuit cards to expand and enhance the capabilities of the computer.

Expansion Slot:

A long, thin socket mounted in an expansion bus which accepts an expansion card.

Export:

To move data in a form that another program can read.

FAQ:

Frequently asked questions, a list of questions and answers that is the most common means of reducing the number of newbie requests in online discussions.

File Fragmentation:

The condition in which, as a consequence of enlarging files and saving them on a crowded disk that no longer contains contiguous blocks of free space to hold them, saves them as fragmented parts in separate areas of the disk and ultimately slows down read-write access time.

File Server:

A powerful microcomputer containing programs and data which may be accessed by other microcomputers that are linked with it via a network.

Firewall:

A feature that protects a network connected to the Internet from being accessed by unauthorized users.

Flame:

A violent and usually personal attack against another person in a news group or other area for public messages.

Floppy Disk:

A thin, flexible plastic disk which has been coated with iron oxide and is capable of storing computer data as a magnetic pattern. Floppy disks are a convenient way of saving data or swapping information for use on another computer.

Font Bitmapping:

A bitmapped rendering of a screen font.

Frequency:

The lines per inch (lpi) in a halftone screen.

Freeware:

Free software, not to be confused with shareware.

Front end:

A program that improves the appeal and ease of use of other programs, normally run locally on a user's computer.

Front-End System:

A workstation or group of workstations that provide one or more operators with the ability to interact with a large scale computer system. For example, a Macintosh computer is a front end for a mainframe.

FTP:

File transfer protocol, a method for accessing file archives and transferring files over the Internet.

Gamut:

The common expression for the entire range of color that can be shown on a computer display.

Gateway:

A connection in the form of a cable, device or computer between two computers or systems that are similar.

GIF:

Graphics interchange format, a common file format for pictures first popularized by CompuServe (pronounced with a hard "g").

Gigabyte:

Abbreviated as Gb or GB, it equals approximately one billion bytes or a thousand megabytes.

Gopher:

A menu-based protocol that allows clients to access files and directories across the Internet.

GPIB:

General Purpose Interface Bus. An interface bus standard recognized by the Institute of Electrical and Electronics Engineers (IEEE).

Graphic Input Device:

An electronic device that digitizes and converts images into a bitmapped image that a computer can manipulate. A scanner converts two-dimensional images-, a video camera converts three-dimensional images.

Graphic Output Device:

An electronic device that converts a bitmapped image into soft or hard reproductions. A video monitor is a soft output device; image setters are hard output devices.

Graphic Tablet:

An electronic device that converts the instructions of the operator through a mouse or stylus into code that the computer can read as commands for direct interaction with the display monitor. Among the tasks that can be accomplished by moving the mouse or stylus on the tablet are computation and display of coordinates, placement and manipulation of image elements and operation of menu items.

GUI:

Graphical user interface, an interactive screen display that provides icons, windows, and point-and-click capability, as distinct from a command-line interface that requires typed instructions.

Hacker:

A computer enthusiast who explores computer systems and programs to the point of obsession; not to be confused with cracker.

Handshake:

The protocol used by two computer systems to establish communication.

Hard Disk:

A mass storage device for digital data. One or more magnetic platters in a single casing. It can store data more precisely and access it more quickly than other forms of magnetic storage.

Hard Copy:

A printed paper copy of output in readable form. It is also a transparency film or photograph of an image displayed on the monitor.

Host:

Any computer system or device attached to the Internet.

Home Page:

The first page of a Web site.

HTML:

Acronym for Hypertext Markup Language. The scripting language used to create Web documents.

HTTP:

Acronym for Hypertext Transport Protocol. The network protocol used by the World Wide Web.

Hypertext:

A link between one document and other, related documents located elsewhere. By clicking on a word or phrase that has been highlighted, a user can skip directly to files related to that subject.

Icon:

A thumbnail-sized picture representing an application, file or document.

I/O Input/Output Image:

The digitized representation of a graphic element (photograph, painting, film) bitmapped in computer memory for display on a video monitor for output in paper or film form.

Image Enhancements:

Electronic functions such as shading, coloring and highlighting that accent an image or a portion of an image.

Image Processing:

The manipulation of an original image from digitization through manipulation to output on a plotter, printer, image setter or plate setter.

Import:

To merge text or graphics into a document that is being created or edited with the aid of a computer program. Usually, the imported file is generated with a different program.

Inkjet Printer:

An electronic output/proofing device that prints by spraying streams of ink onto the paper.

Installation:

The process of delivering, setting up and testing a complete or partial electronic system at a site specified by the purchaser.

Interface:

The hardware and software that enable electronic devices to share information.

Internet:

The world's largest collection of networks with an estimated 30 million users reaching universities, government research labs, military installations and business organizations in many countries.

Internet Service Provider:

A company or other organization that offers connections to the Internet through its own computers, which are part of the Internet.

Intranet:

An internal corporate Web site. Intranets are either not connected to the Internet or are shielded from external Internet users by a firewall.

IP Number:

Sometimes called a "dotted quad." A unique number consisting of four parts separated by dots (e.g. 165.113.245.2). Every machine that is on the Internet has a unique IP number -- if a machine does not have an IP number, it is not really on the Internet. Most machines also have one or more Domain Names that are easier for people to remember.

IPX:

Acronym for Internetwork Packet Exchange. Default protocol used by NetWare systems to route information packets over a local or wide area network. IPX has the same functions as TCP/IP.

IRC:

Internet relay chat, real-time conversations among multiple users on hundreds of subject-oriented channels ranging from #nfl to #l 2-step to #wetfun (popular chat channels).

ISDN:

Acronym for Integrated Services Digital

Network. A new telecommunications standard being introduced by telephone companies. It enables the transmission of voice, data, and certain images over telephone lines through end-to-end digital circuits.

ISO:
International Standards Organization.

Kilobyte:
K, Kb or KB. A unit of measuring digital information which equals 1,024 bytes.

LAN:
Local Area Network. A pathway that links workstations, printout devices and storage units through broadband cable and provides high-speed simultaneous communication in a relatively small area.

LaserPrep:
A set of commands that translates most Macintosh text and graphics files into PostScript files.

LPI:
Lines per inch.

Luminosity:
Value corresponding to the brightness of color.

Lurker:
A regular reader of online messages who never sends a post.

Low Res:
Abbreviation for low resolution.

Lynx:
A popular text-based Web browser.

Macro:
A series of keystrokes that can be called up by pressing one special key combination. Many word processing programs allow the user to create macros to speed up complex operations that are frequently used.

Megabyte:
Mb or MB. A unit of measure for digital data which is 1,024 kilobytes or 1,048,576 bytes.

Microprocessor:
The silicon chip with thousands of electronic components that serves as the central processing unit (CPU) in microcomputers.

MIPS:
Millions of Instructions Per Second

Modem:
An abbreviation for modular/demodulator, a device that translates digital signals into sound frequencies and back again for telephone transmission.

Motherboard:
The assembly in a computer into which printed circuit cards, modules or boards are connected. In a microcomputer, this is the main circuit board.

MPEG:
Moving pictures expert group, an international standard for video compression and desktop movie presentation, required to view movies on a computer.

Multitasking:
Running two or more computer programs simultaneously.

MUD:
Multi-user dimension or multi-user dungeon, a virtual world created solely from text descriptions by many users, with applications ranging from role-playing games to academic conferences.

Net:
A colloquial term used to refer to the entirety of cyberspace including, for example, the Internet, commercial services, and BBS's.

Netiquette:
The rules of cyberspace civility, enforced exclusively by fellow users.

Newbie:
A newcomer to the Internet.

News Group:
A public bulletin board on the Internet; collectively, the more than 12,000 news groups, organized by subject, are known as Usenet.

Networking:
The process of accessing and manipulating files through communication pathways between workstations, printout devices, such as print servers and storage units, such as file servers.

NSFNET:

A network that serves as part of the current Internet backbone funded by the National Science Foundation.

Noise:

Unwanted electronic or optical signals that cause interference in the reproduction of data or images.

Object-Oriented:

A type of drawing that defines an image mathematically rather than as pixels in a bitmap.

OCR:

Optical Character Recognition. A function of specialized software capable of interpreting a scanned image of text into machine code for later manipulation of text.

Off-Loading:

Relieving the intensive amount of data processing associated with a specific application from the CPU by performing those calculations in a dedicated or specialized processor.

Off-line Storage:

Storage of digital data on devices separate from the main system.

One-Bit Image:

An image with only black and white pixels.

Operating System:

The essential software that directs the flow of information to and from the different components of a computer system.

Optical Disk:

A type of high-capacity computer storage disk which stores information in a mode similar to CD-ROM but is erasable and reusable.

Output:

Information that has been manipulated by the CPU of the computer and displayed either on the video monitor or rendered as usable information by another device.

Output Resolution:

Stated in lines per inch or lines per millimeter, output resolution reflects the number of pixels per unit size that can be output.

Parallel Transmission:

Sending data from a computer down several wires simultaneously, the pulses in one wire being precisely synchronized with the pulses in the other wires.

PDL:

Page Description Language.

Peripherals:

A connectable device that has an auxiliary function outside of the permanent system configuration.

PICT/PICT-2:

A picture file format developed by Apple for use on the Macintosh. The format defines bitmapped or object-oriented images on the screen. PICT-2, a more recent version, supports 24-bit color.

Pixel:

The abbreviation for picture element. The separate elements of a bitmapped image on a video monitor.

Pixelate:

The electronic function by which pixel size can be increased to enable easy manipulation in creating special effects.

Point of Presence:

A POP is the regional hub by an Internet Service Provider to connect networks.

PPI:

Pixels per inch.

Port:

A socket, usually at the back of a computer, that allows the computer to be connected to other devices.

PostScript:

A page-description language (PDL) developed by Adobe Systems. When a page is stored as a set of instructions specifying the measurements, typefaces and graphic shapes that make up a page.

PPP:

Point-to-Point Protocol connection between a computer and the Internet, offering advantages over dial-up access such as support for a graphical Web browser (for example, Netscape) and simultaneous multiple

connections; requires special software and a PPP service provider.

PPD File:

PostScript Printer Description File. A file that contains information on screen angle, resolution, page size and device-specific information for a file to be printed on a PostScript device.

Print Engine:

A mechanism that uses a laser to create an electrostatic image of a page and transfers it to a sheet or roll of paper.

Queue:

A multi-element data structure from which elements can be removed only in the same order in which they were inserted; in a priority queue, removal is based on factors other than order of insertion and removed according to some priority value assigned to each.

RAM:

Random Access Memory. The memory a computer needs to store the information it is processing at any given moment. This is short-term memory and is lost when the power is shut off.

Rasterization:

The process of converting mathematical and digital information into a series of dots by an imagesetter or recorder as digital data that will be used for output.

Read:

The process by which the CPU is instructed to find specified digital data for display or output.

Real-time:

The Net term for live as in "live broadcast;" real-time connections include IRC and M1JDs.

Refresh:

The process by which more information is brought to the video display after an alteration or other action.

Repagination:

The process used to change page numbers in multi-page documents while retaining a uniform format and proper numerical sequence.

Repeatability:

The precision with which a device can position an image, usually measured in microns. For example, a capstan imagesetter has low repeatability compared with a drum imagesetter which is more accurate in its operation.

Resolution:

The number of pixels per unit of linear measurement on a video display or the number of dots per inch in printed form.

RGB:

Red, Green and Blue. The additive primaries which are used in video monitors.

RIP:

Raster Image Processor. The hardware/software which converts data stored in a computer into a series of lines of tiny dots which are output to film, proof, plate or printer. In line work, the dots can be grouped to create solid areas. RIPing is most commonly associated with the conversion of a PostScript File to a "raster" that can then be imaged by the imagesetter.

ROM:

Read Only Memory. The computer memory that can be read by the CPU of the computer but cannot be altered.

Router:

A special-purpose computer (or software package) that handles the connection between two or more networks. Routers connect local area networks to wide area networks, creating an internet (small i, simply a combination of any two other networks). Routers are used extensively on the Internet (capital I, the global network successor to the ARPANet).

Scanner:

An input device that digitizes and converts two-dimensional information, such as photographic prints, transparencies and paper images into bit-mapped images that can be manipulated electronically.

Screen Angle:

The angles used to offset the different patterns for overprinting each other in process color printing. Proper angles are critical to the prevention of moiré patterns.

Screen Ruling:

Sometimes confused with resolution, screen ruling is the number of printing dots per millimeter or per inch on the exposed film. The screen ruling is a critical factor in determining the resolution need. The finer the screen ruling, the higher the resolution needs to be, due to the amount of information required to generate the printing dots.

SCSI:

Small Computer Standard Interface. An industry standard enabling external devices, such as a disk drive, to be plugged into a computer made by any manufacturer whose product conforms to the SCSI specification.

Sectors:

Divisions on magnetic media used for storing digital information. A single sector is the smallest contiguous unit of information; multiple sectors make up a track.

Sequential Storage:

Recording data in a linear mode, stringing codes sequentially on a magnetic tape. Although it is a less expensive storage form, it is a more time-consuming method of retrieval.

Serial Communication:

See asynchronous communication.

Server:

A computer connected to a network that offers various services, such as document viewing or file transfers, to other computers called clients.

Service Bureau:

A company that provides the various services required to transform the elements used to produce a page or publication into the correct digital format required to output it to a particular chosen media. These include conventional print, various forms of direct digital printing, disk-based and other forms of alternative media.

Shareware:

Freely distributed software, often available from vast FTP archives on the Net that includes a request from the programmer for voluntary payment.

Sharpen:

The electronic manipulation of an image to alter the edge contrast of its elements.

SLIP:

Serial Line Internet Protocol connection between a computer and the Internet, offering advantages over dial-up access such as support for a graphical Web browser (for example, Netscape) and simultaneous multiple connections; requires special software and a SLIP service provider.

SMTP:

Simple mail transfer protocol, an e-mail protocol used to transfer e-mail from one server to another for distribution to the appropriate client.

Soft Proof:

A proof that is viewed on a color-calibrated video monitor as opposed to a hard proof on paper.

Spam:

The posting of an article to many newsgroups, regardless of the appropriateness of the topic; for example, "You can grow rich overnight."

Spectrum:

The bands of color formed when white light is dispersed. Each color has a specific wavelength from the shortest -- violet, to the longest -- red.

Spooler:

A method by which a computer can store data and feed it gradually to an external device, such as a printer which is operating more slowly than the computer.

Stripping:

The process of manually creating composite films and fully imposed flats for plate-making. Most of this work is being done electronically, bypassing the traditional craftsman.

Style sheet:

A list of page format specifications including typographic and layout specs. In desktop publishing, a style sheet can be stored, retrieved and applied to individual elements of the page displayed on the screen.

System:

An integrated assembly of electronic hardware and software designed to implement a given application or set of applications.

T-1:

A leased-line connection capable of carrying data at 1,544,000 bps. At maximum theoretical capacity, a T-1 line could move a megabyte in less than 10 seconds. That is still not fast enough for full-screen, full-motion video, for which you need at least 10,000,000 bps. T-1 is the fastest speed commonly used to connect networks to the Internet.

T-3:

A leased-line connection capable of carrying data at 45,000,000 bps, more than enough for full-screen, full-motion video.

TIFF:

Tagged Image File Format. A graphics and page layout file format for desktop computers. Used as an intermediary file format for both color and black and white images, TIFF is used to transfer documents between different applications and computer platforms.

Tape Drive:

An electronic device that can read or write information on a formatted magnetic tape.

Task Switching:

A feature offered by some disk operating systems allowing the user to copy two or more programs into computer memory at the same time so that the user can switch quickly from one program to the other. This is different than multitasking in which programs not only reside in memory simultaneously, but may be used simultaneously.

TCP/IP:

Acronym for Transmission Control Protocol/Internet Protocol. Default protocol used by UNIX systems to route information packets over a local or wide area network. The standard protocol upon which the Internet is based.

Telnet:

An Internet program that allows a user to log on to other Internet-connected computers.

Terabyte:

Tb or TB. Equal to approximately one billion kilobytes and often used to measure optical disk storage capacity.

Tiling:

An electronic function for use with documents

that are larger than the specified paper size. The document can be broken into sections the size of the paper and then assembled.

Tracking:

Small, uniform adjustment to the amount of space separating adjacent typeset letters.

Trade Shop:

A company that serves the printing "trade." Often referred to as "color separators," many trade shops have expanded services and markets and are appropriately designated as prepress trade shops or service bureaus.

TCP/IP:

Transmission Control Protocol and Internet Protocol that forms the basis of a full fledged Internet connection.

Trap:

An overlap or underlap between colors that butt against each other to hide misregistration during printing. Types of traps include shrinks (chokes) and spreads.

Turnkey System:

A completely integrated computer system that includes all the hardware and software necessary to perform specific tasks.

UNIX:

An operating system often implemented on high-powered workstations. It has advantages in situations where one computer serves many users or where two or more tasks must be executed simultaneously on one computer.

URL:

Uniform Resource Locator, the World Wide Web address of an Internet resource, for example, GE's URL is <http://www.ge.com>.

User Interface:

The method by which a user gives instructions to a computer and receives a response.

USENET:

A distributed, Internet-wide bulletin board system that is the basis of network news.

Vector Graphics:

Object-oriented graphics in which an image is stored as a series of numbers defining size, position and shape. Such objects must be "rasterized" prior to processing for output.

Veronica:

Very Easy Rodent Oriented Net-wide Index to Computerized Archives. Developed at the University of Nevada, Veronica is a constantly updated database of the names of almost every menu item on thousands of Gopher servers. The Veronica database can be searched from most major gopher menus.

Virtual Memory:

The use of a portion of the hard disk to swap-out data when insufficient RAM exists to hold all such data.

Virus:

A small program commonly embedded in another program, that infects programs and causes them to malfunction. It is often designed to destroy data and infect other programs, drives and disks.

WAIS:

Wide Area Information Servers. A commercial software package that can index huge quantities of information, and then make those indices searchable across networks such as the Internet. A prominent feature of WAIS is that the search results are ranked ("scored") according to how relevant the "hits" are, and that subsequent searches can find "more like this" and thus refine the search process. WAIS is a prominent feature in such search engines as Excite and Yahoo.

WAN:

Acronym for Wide Area Network. A physical communications network that operates across large geographical distances.

Web Browser:

A client program that enables the viewing of Web pages, the most popular Web browsers are Netscape Navigator and Microsoft Internet Explorer.

Web Page:

A hypertext document available on the World Wide Web that can incorporate graphics, sounds and links to other Web pages, FTP sites, gophers, and other Internet resources.

Windows:

Transparent areas that show space allocated for an image on a video display of a page layout. Also, an operating system marketed by Microsoft Corp. for use on PC-compatibles to offer a graphical user interface similar to that of Macintosh.

Workstation:

A configuration of computer equipment designed to be used by one person at a time. A workstation may have a terminal connected to a larger computer or may be independent with local processing capability. In four-color process printing, it usually consists of an input device such as a keyboard, digitizer or scanner, a video display device, a memory and an output device such as a printer or plotter.

World Wide Web:

A hypermedia-based system on the Internet that is navigated by selecting hypertext links between text or graphics and other Web pages or Internet resources, also called Web or WWW.

WORM:

Write Once/Read Many. It refers to the permanent, unalterable nature of data in certain kinds of storage media.

Zoom:

An electronic function that increases or reduces the magnification of the image displayed on the video screen.

